# INSTRUCTIONS AND DOCUMENTATION FOR DDS-35

By
R.C. Obuch, W. R. Beeman, R.F. Mast, D.L. Barnett, and R.R. Charpentier
USGS, Lakewood, CO

## INTRODUCTION

This CD-ROM releases digital map data, figures, and text used in the "1995 National Assessment of United States Oil and Gas Resources -- Results, Methodology, and Supporting Data," U.S. Geological Survey Digital Data DDS-30 (Gautier and others, 1995) in such a way that the maps and text may be printed by computer users from their own systems. Because of the number and variety of mapping and word processing programs available, we have provided the data in a raw form, by latitude and longitude for the maps, and in both formatted text (ans) and rich text format (rtf) for the geologic descriptions. For the maps, the production data (cell data) are represented by files with a .cls extension and the line data are represented by files with a .lin extension. Text of the various geologic descriptions can be printed directly from many computer operating systems, such as UNIX, VMS, Macintosh, and Microsoft DOS. The rich-text format, which retains the original fonts and text attributes, must be imported into a word-processing program that supports that format. Not included in this CD-ROM are the statistical graphs; tabular data, including estimates, by play; and the province index maps. These data can be found on DDS-36 (Charpentier and others, 1996). Estimates by province, region, type of accumulation, and totals are provided in the executive summary of results (execsum.ans and execsum.rtf).

Macintosh users will note that box-shaped characters appear at the beginning of each line of text and (or) data when viewed by applications such as TeachText. These characters are linefeeds that are needed by DOS applications. The linefeed characters can be removed with a text editor or word processor by searching for and deleting "control-j" characters.

The map data and geologic text released on this CD-ROM are nonproprietary in nature. Certain map data, reservoir information, and geologic descriptions are not included either on this CD-ROM or on DDS-30 because they are considered proprietary by the database vendors, NRG Associates, Inc., and Petroleum Information Corporation, or other third-party entities such as the Energy Information Administration. Proprietary data cannot be released to the public.

This file ("Instructions and Documentation for DDS-35," having file names readme.ans or readme.rtf) contains five appendixes: Appendix A lists region and province numbers and names. Appendix B is a cross reference of titles from DDS-30 to the files located in the "chapters" subdirectory of this CD-ROM. Appendix C is the directory tree structure used in this CD-ROM. Appendix D is a list in outline form of all reports and their

authors included in DDS-30. Appendix E is an explanation of the mapping strategy used in plays 5801, 5804, 5812, and 6101. Appendix F provides documentation for the exploration cell maps.

Located in the root directory is a file named dds30.err which is a compilation of errata for U.S. Geological Survey Digital Data Series DDS-30 (Gautier and others, 1995).

**VIEWER PROGRAMS**

Five viewer programs are included in this CD-ROM and run only in MS-DOS. They are:

(1) Map display program quikvu20.exe, in the "programs" subdirectory, was designed to be copied from the CD-ROM to the user's hard drive to speed up the map viewing process. The program quikvu20.exe will then search for the appropriate .cls and .lin files in the same directory where it is located. Users can copy to their local hard drive (into a single subdirectory) quikvu20.exe and the selection of regional .lin files, province .cls and .lin files, and play .cls and .lin files needed for their area of interest (users should be aware that these files will be write-protected). The regional .lin and province .lin files are needed if the option of regional background and province outline are selected when running quikvu20.exe or quikview.exe.

(2) Map display program quikview.exe (located in the root directory) is designed to run from the CD-ROM rather than from the user's hard drive. It uses the established directory structure of the CD-ROM to search for the appropriate .cls and .lin map files. As an alternative, the user could run quikview.exe from the hard drive, but the subdirectory names and file locations relative to the location of quikview.exe would have to be similar to those on the CD-ROM. Users can copy an entire region and its subdirectory structure to their hard drive and display play and province level maps that are contained in that particular region. Files copied from the CD-ROM will contain the read-only attribute, which will cause file delete errors in DOS. Users can turn off the read-only attribute with the DOS ATTRIB (option /S) program.

Running quikview.exe from the CD-ROM is much slower than running quikview.exe and quikvu20.exe from the hard drive due to the speed limitations of CD-ROM technology. In benchmark tests using play "4700" (the province-level map for the Western Gulf province -- the largest such map in the data set) on a 486/66 micro-computer, quikvu20.exe took approximately 5 minutes running from the hard drive while quikview.exe (executing from the CD-ROM drive) took almost 3 hours running from the same computer with a double speed CD-ROM reader. For small maps, however, quikview.exe does give adequate performance, drawing the map in a matter of minutes.

(3) Map display program alaskavu.exe (located in the root directory), is a program similar to quikview.exe for use with maps of Alaska. It runs from the CD-ROM rather than from the user's hard drive. As an alternative, the user could run alaskavu.exe from the hard drive, but the subdirectory names and file locations relative to the location of alaskavu.exe would have to be similar to those on the CD-ROM. Users can copy the entire "region1" subdirectory and its subdirectory structure to their hard drive and display play and province level maps that are contained in "region1".

(4) The program cshow.exe is a shareware image-display program (CompuShow) developed by Bob Berry of Canyon State Systems and Software. Located in the "programs" directory is cshowa.exe, a self-extracting archive of the program cshow.exe, supporting drivers, and documentation. Users must run the cshowa.exe program to install cshow.exe and supporting files to their hard drives. When running cshowa.exe, users will be asked where to install cshow.exe. The program will then self-extract cshow.exe and the supporting files to the location specified. After installation, cshow.exe can be used to view the JPEG images on this CD-ROM. The documentation describes the specific shareware guidelines concerning the use of cshow.exe .

(5) \chapters\hydrates\hydvu20.exe, which runs only from the "hydrates" subdirectory, is a special program for viewing the gas hydrate maps. As an alternative, the user could run hydvu20.exe from the hard drive, but the subdirectory names and file locations relative to the location of hydvu20.exe would have to be similar to those on the CD-ROM. Users can copy the entire "hydrates" subdirectory to their hard drive and display gas hydrate maps that are contained in the "hydrates" subdirectory.

The programs quikvu20.exe, alaskavu.exe, and hydvu20.exe were developed for this report for quick viewing of the province and play maps stored in ASCII. Users can interrupt (return to the DOS prompt) quikview.exe and quikvu20.exe by entering a SHIFT X keystroke sequence during program execution. All three programs (quikvu20.exe, alaskavu.exe, and hydvu20.exe) plot the 1/4-mile by 1/4-mile .cls province and play data, rather than the 1-mile by 1-mile .cls regional data. A viewer for the regional data is not provided, but the data are plotted in the national map that is provided in Adobe Illustrator format (regprov.ai), JPEG format (regprov.jpg), and HPGL2 graphics output format (regprov.hp).

Many of the MACROMEDIA illustrations used in DDS-30 have been converted to JPEG images for more rapid viewing by the user. JPEG images (.jpg extension) are included for the figures and tables of the executive summary of results and for other chapters, for the United States map showing the regions assessed (see index.jpg, located in the root directory), and for the stratigraphic charts (prxxst.jpg) for each province. JPEG images are not included for the index maps of the provinces, but an outline of each province is included (filexx00.lin). In addition to the JPEG image format, Adobe Illustrator versions (.ai extension) for many of the chapter figures and stratigraphic charts (prxxst.ai) are

also provided. The Adobe files were created with Adobe Illustrator version 5.5 for Macintosh.

Copyright restrictions limit the selection of viewers on DDS-35. Other viewers that support the JPEG format are available from many anonymous File Transfer Protocol (FTP) sites for MS-DOS, UNIX, Macintosh, and Windows operating systems; such viewers include "lview" (Windows) and "jpegview" (Macintosh). Anonymous FTP sites to investigate for viewers include: ftp.ncsa.uiuc.edu and greenwood.cr.usgs.gov. Users can FTP to these locations, and, with the user name "anonymous" and a password such as "guest" or their e-mail address, obtain viewers as well as a wide variety of publicly available shareware programs and utilities. JPEG images can be viewed, printed, and converted to other graphical formats through the use of some of the newer JPEG viewers available through anonymous FTP sites. Two web sites that may also be useful places to check for viewers are SimTel:

http://www.acs.oakland.edu/oak/oak.html

and Jumbo:

http://www.jumbo.com

**OTHER PROGRAMS**

There are two ARC/INFO Macro Language (AML) files located in the programs subdirectory:

(1) The program prcls.aml, designed by William Beeman, is used to convert ASCII cell files at province level into ARC/INFO coverages. It assumes that the ASCII cell data files have data for x, y location and production type only and have been downloaded from DDS-35 to the same directory where prcls.aml is located.

(2) The program regcls.aml, designed by William Beeman, is used to convert ASCII cell files at region level into ARC/INFO coverages. It assumes that the ASCII cell data files have data for x, y location and various data items (reference file celldoc.txt for a complete description of data items) and have been downloaded from DDS-35 to the same directory where regcls.aml is located.

**OVERVIEW OF THE CD-ROM STRUCTURE**

The directory structure for this CD-ROM is based upon the structure of the 1995 National Oil and Gas Assessment as portrayed in DDS-30. There are 8 regions for the assessment, consisting of 71 provinces. (Province 30 was merged with province 28 (North Central Montana); province 30 was dropped. Province 6, Klamath - Sierra Nevada, was not assessed. Province 15, San Diego - Oceanside, is not included; it will be assessed by the Minerals Management Service.) The directory structure consists of 12 main directories (chapters, fedoffsh, national, programs, region1, region2, region3,

region4, region5, region6, region7, and region8). Each regional directory contains text, map data, and separate subdirectories for each province within that region (provxx where xx is the province number assigned for the assessment). The province subdirectory contains the supporting map data, geologic descriptions, and stratigraphic columns for all of the plays assessed within the specific province. The directory called "fedoffsh" contains 1/4-mile cell data (fedoffsh.cls) for the Federal offshore waters adjacent to the lower 48 States and 1/4-mile cell data (akfedoff.cls) for the Federal offshore waters adjacent to Alaska. The directory called "national" contains State and county line data (State and county outlines) for the lower 48 States. In addition, a 40-inch by 28-inch region and province index map for the lower 48 States (Dolton and others, 1996) is provided in Adobe Illustrator format (regprov.ai), JPEG format (regprov.jpg), and HPGL2 graphics output format (regprov.hp). The directory called "chapters" contains other assessment information that is not specific to a particular region. This information includes printable files such as the executive summary of results of the 1995 National oil and gas assessment; specific reports relating to topics such as methodology, GIS, and coalbed methane; and JPEG images of figures, maps, plates, and tables contained in the various chapters.

The root directory of DDS-35 also includes nine files. Both formatted text (readme.ans) and rich-text format (readme.rtf) versions of this readme file are included. The plain text file dds30.err is a compilation of errata for U.S. Geological Survey Digital Data Series 30 (DDS-30, Gautier and others, 1995). Viewers alaskavu.exe and quikview.exe are included. The file permissn.jpg is a JPEG image of a letter from Bob Berry of Canyon State Systems and Software granting permission to distribute the CompuShow viewer (cshow.exe). Three text files are extracts from this readme file. File celldoc.txt is a copy of appendix F of this readme file, file authors.ans is a copy of the title block, and disclaim.ans is a copy of the disclaimer.